CLAIMS

1. A communication apparatus comprising:

a radiocommunication means for sending and receiving data to and from a host device via a radiocommunication network;

an external communication means for connection to a communication network outside the radiocommunication network to send and receive data to and from the external communication network;

a storage means for storing a radiocommunication protocol for use to send and receive data within the radiocommunication network, an external communication protocol for use to send and receive data to and from the external communication network, and communication setting information on the external communication network; and

a communication controlling means for controlling the external communication means by a use of communication setting information stored in the storage means to set a connection with the external communication network according to the external communication protocol, while controlling the radiocommunication means to set a connection with the host device according to the radiocommunication protocol stored in the storage means, thereby controlling the radiocommunication means and external communication means to transfer data between the external communication network and host device.

2.   The apparatus according to claim 1, wherein the storage means stores a mobile telephone communication protocol for use to connect to a mobile network; and

the communication controlling means uses the mobile telephone communication protocol stored in the storage means for use to connect to the mobile network to set a connection between the mobile network and host device via the radiocommunication network.

3.   The apparatus according to claim 1, wherein the storage means stores personal information on a user of the host device; and

the communication controlling means uses the communication setting information and personal information stored in the storage means to transfer data between the host device and external communication network.

4.   The apparatus according to claim 1, wherein the storage means stores at least one of PPP (point to point protocol), IP (Internet protocol) and TCP (transport control protocol) as the external communication protocol; and

the communication controlling means uses at least one of the protocols stored in the storage means to set a relation of connection between the external communication means and external communication network in order to control data transfer between the host device and external communication network.

5.   A communication method for transferring data between a host device and communication apparatus via a radiocommunication network, while transferring data between an external communication network outside the radiocommunication network

and the communication apparatus comprising the steps of:

setting a relation of connection between the communication apparatus and host device according to a radiocommunication protocol held in the communication apparatus, while setting a relation of connection between the communication apparatus and external communication network according to an external communication protocol by a use of communication setting information on the external communication network, held in the communication apparatus; and

transmitting and receiving data between the external communication network and host device by a use of the relation of connection between the communication apparatus and host device and that the relation of connection between the communication apparatus and external communication network.

6.   The method according to claim 5, wherein a mobile telephone communication protocol for use to connect to a mobile network is held in the communication apparatus; and

the mobile telephone communication protocol is used to set the relation of connection between the mobile network and host device via the radiocommunication network.

7.   The method according to claim 5, further comprising the steps of:

holding personal information on the user of the host device in the communication apparatus; and

setting the relation of connection between the host device and external

communication network according to the external communication protocol by a use

of the communication setting information and personal information.

8.   The method according to claim 5, further comprising the steps of:

holding at least one of PPP (point to point protocol), IP (Internet protocol) and

TCP (transport control protocol) in the communication apparatus as the external

communication protocol; and

setting a connection between communication apparatus and external

communication network by a use of at least one of the protocols.